

AJAX Flight 217 (2018 January 30) - Two Wing Pods

Aim: To collect two sequential over-land vertical profiles of GHG, HCHO, and MMS from FL 270/280 to lowest possible altitude, for comparison with TROPOMI instrument on Sentinel 5P satellite.

First Target centerpoint: 39° 6' 00" N, 122° 21' 18" W ,
elev. 920 ft with local terrain to 1500 ft

Second Target centerpoint: 39° 33' 00" N, 121° 52' 00" W, elev. ~100 ft

Test	Altitude (Kft)	Airspeed	Objective	Maneuvers	Time (min)
1	FL280	Cruise	Take off from KNUQ and transit to first target location	- Take off, ascend to cruise altitude - Annotate arrival time	15
2	varies	Descent 1500 ft/min	Perform descending spiral profile	- Starting at 27-28 kft and ending at lowest altitude possible, fly spiral descent at 1.5 kft/min, fly tight circles around target coordinates (~3 nm radius)	20
3	varies	pilot's discretion	Return to top and adjust location to second target	- Adjust altitude to 27-28 kft and transit to second target	10
4	varies	Descent 1500 ft/min	Perform descending spiral profile	- Starting at 27-28 kft and ending at lowest altitude possible, fly spiral descent at 1.5 kft/min , ~3 nm radius	20
5	TBD	Cruise	Return to KNUQ	- Transit, descend and land - Annotate landing time at KNUQ	15

**Flight path coordination & authorization will be obtained from FAA/ATC before each flight.